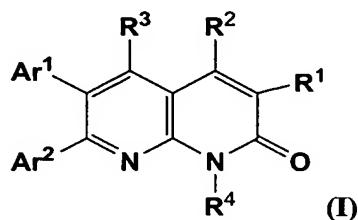


IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (original). A compound of structural formula I:



and pharmaceutically acceptable salts thereof, wherein:

R<sup>1</sup> is selected from:

- (1) halogen,
- (2) C<sub>1</sub>-6alkyl,
- (3) -CN,
- (4) -C(O)R<sup>7</sup>,
- (5) -OR<sup>d</sup>,
- (6) -NR<sup>5</sup>R<sup>6</sup>,
- (7) -S(O)<sub>2</sub>R<sup>7</sup>,
- (8) cycloalkyl,
- (9) cycloheteroalkyl,
- (10) aryl, and
- (11) heteroaryl,

wherein each alkyl moiety is unsubstituted or substituted with one, two, or three substituents independently selected from R<sup>a</sup>, and each cycloalkyl, cycloheteroalkyl, aryl and heteroaryl moiety is unsubstituted or substituted with one, two, or three substituents independently selected from R<sup>b</sup>;

R<sup>2</sup> is selected from:

- (1) hydrogen,
- (2) -NR<sup>5</sup>R<sup>6</sup>,
- (3) -C(O)R<sup>7</sup>,
- (4) C<sub>1</sub>-6alkyl,
- (5) C<sub>2</sub>-6alkenyl,
- (6) C<sub>2</sub>-6alkynyl,
- (7) aryl,
- (8) arylC<sub>1</sub>-6alkyl-,

- (9) arylC<sub>2-6</sub>alkenyl-,
- (10) heteroaryl,
- (11) heteroarylC<sub>1-6</sub>alkyl-,
- (12) heteroarylC<sub>2-6</sub>alkenyl-,
- (13) cycloalkyl,
- (14) cycloheteroalkyl-, and
- (15) -OR<sup>d</sup>,

wherein each alkyl, alkenyl, and alkynyl moiety is unsubstituted or substituted with one, two, or three substituents independently selected from R<sup>a</sup>; and each aryl and heteroaryl moiety is unsubstituted or substituted with one, two, or three substituents independently selected from R<sup>b</sup>; and each cycloalkyl and cycloheteroalkyl moiety is unsubstituted or substituted with one, two, three or four substituents independently selected from R<sup>b</sup> and oxo;

or R<sup>1</sup> and R<sup>2</sup> together form a 4 to 7 membered ring, containing 0, 1, or 2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; unsubstituted or substituted on carbon or nitrogen with one, two or three substituents independently selected from R<sup>b</sup>, wherein one or two of the carbon substituents may also be oxo, and wherein the ring is saturated or has one degree of unsaturation;

R<sup>3</sup> is selected from:

- (1) hydrogen,
- (2) C<sub>1-6</sub>alkyl,
- (3) C<sub>1-6</sub>alkyloxy-,
- (4) trifluoromethyl,
- (5) trifluoromethoxy-,
- (6) halo, and
- (7) C<sub>3-7</sub>cycloalkyl,

wherein the alkyl moiety is unsubstituted or substituted with one, two, or three substituents independently selected from R<sup>a</sup>, and the cycloalkyl moiety is unsubstituted or substituted with one to three substituents selected from R<sup>b</sup> and oxo;

R<sup>4</sup> is selected from:

- (1) hydrogen, and
- (2) -CH<sub>2</sub>-R<sup>8</sup>;

R<sup>5</sup> and R<sup>6</sup> are each independently selected from:

- (1) hydrogen,
- (2) C<sub>1-10</sub>alkyl,
- (3) C<sub>2-10</sub>alkenyl,
- (4) C<sub>2-10</sub>alkynyl,

- (5) aryl,
- (6) arylC<sub>1-4</sub>alkyl-,
- (7) heteroaryl,
- (8) heteroarylC<sub>1-4</sub>alkyl-,
- (9) cycloalkyl,
- (10) cycloalkylC<sub>1-4</sub>alkyl-,
- (11) trifluoromethyl,
- (12) -C(O)-R<sup>c</sup>,
- (13) -CO<sub>2</sub>R<sup>c</sup>,
- (14) -C(O)C(O)OR<sup>c</sup>,
- (15) -C(O)C(O)NR<sup>e</sup>R<sup>f</sup>,
- (16) -S(O)<sub>m</sub>R<sup>c</sup>, and
- (17) -C(O)N(R<sup>d</sup>)S(O)<sub>m</sub>R<sup>c</sup>,

wherein each alkyl, alkenyl, alkynyl moiety is unsubstituted or substituted with one or two R<sup>a</sup> substituents, and each cycloalkyl, heteroaryl and aryl moiety is unsubstituted or substituted with one or two R<sup>b</sup> substituents,

or R<sup>5</sup> and R<sup>6</sup> together form =CH-N(R<sup>e</sup>)(R<sup>f</sup>);

R<sup>7</sup> is selected from:

- (1) hydrogen,
- (2) C<sub>1-10</sub>alkyl,
- (3) C<sub>2-10</sub> alkenyl,
- (4) C<sub>2-10</sub>alkynyl,
- (5) cycloalkyl,
- (6) cycloalkyl-C<sub>1-10</sub>alkyl-,
- (7) cycloheteroalkyl,
- (8) cycloheteroalkyl-C<sub>1-10</sub> alkyl-,
- (9) aryl,
- (10) heteroaryl,
- (11) aryl-C<sub>1-10</sub>alkyl-,
- (12) heteroaryl-C<sub>1-10</sub>alkyl-,
- (13) -OR<sup>e</sup>,
- (14) -NR<sup>d</sup>R<sup>e</sup>,
- (15) -NH(C=O)OR<sup>e</sup>, and
- (16) -NR<sup>d</sup>SO<sub>2</sub>R<sup>e</sup>,

wherein each alkyl, alkenyl, and alkynyl moiety is unsubstituted or substituted with one, two, three or four substituents independently selected from R<sup>a</sup>, and each cycloalkyl,

cycloheteroalkyl, aryl and heteroaryl moiety is unsubstituted or substituted with one, two, three or four substituents independently selected from R<sup>b</sup>;

R<sup>8</sup> is selected from:

- (1) hydrogen,
- (2)  $-(CH_2)_nOC(O)R^e$ ,
- (3) C<sub>1</sub>-galkyl,
- (4) C<sub>2</sub>-8 alkenyl,
- (5) C<sub>2</sub>-galkynyl,
- (6) cycloalkyl,
- (7) cycloalkyl-C<sub>1</sub>-galkyl-,
- (8) cycloheteroalkyl,
- (9) cycloheteroalkyl-C<sub>1</sub>-8 alkyl-,
- (10) aryl,
- (11) heteroaryl,
- (12) aryl-C<sub>1</sub>-galkyl-, and
- (13) heteroaryl-C<sub>1</sub>-galkyl-,

wherein each alkyl, alkenyl, and alkynyl moiety is unsubstituted or substituted with one, two, three or four substituents independently selected from R<sup>a</sup>, and each cycloalkyl, cycloheteroalkyl, aryl and heteroaryl moiety is unsubstituted or substituted with one, two, three or four substituents independently selected from R<sup>b</sup>;

Ar<sup>1</sup> and Ar<sup>2</sup> are independently selected from:

- (1) aryl,
- (2) heteroaryl,

wherein each aryl and heteroaryl moiety is unsubstituted or substituted with one, two, three or four substituents independently selected from R<sup>b</sup>;

each R<sup>a</sup> is independently selected from:

- (1) -OR<sup>e</sup>,
- (2) -NR<sup>d</sup>S(O)<sub>m</sub>R<sup>c</sup>,
- (3) -NO<sub>2</sub>,
- (4) halogen,
- (5) -S(O)<sub>m</sub>R<sup>c</sup>,
- (6) -SR<sup>e</sup>,
- (7) -S(O)<sub>2</sub>OR<sup>e</sup>,
- (8) -S(O)<sub>m</sub>NR<sup>e</sup>R<sup>f</sup>,
- (9) -NR<sup>e</sup>R<sup>f</sup>,
- (10) -O(CR<sup>e</sup>R<sup>f</sup>)<sub>n</sub>NR<sup>e</sup>R<sup>f</sup>,

- (11)  $-\text{C}(\text{O})\text{R}^{\text{c}}$ ,
- (12)  $-\text{CO}_2\text{R}^{\text{c}}$ ,
- (13)  $-\text{CO}_2(\text{CR}^{\text{e}}\text{R}^{\text{f}})_n\text{CONR}^{\text{e}}\text{R}^{\text{f}}$ ,
- (14)  $-\text{OC}(\text{O})\text{R}^{\text{c}}$ ,
- (15)  $-\text{CN}$ ,
- (16)  $-\text{C}(\text{O})\text{NR}^{\text{e}}\text{R}^{\text{f}}$ ,
- (17)  $-\text{NR}^{\text{d}}\text{C}(\text{O})\text{R}^{\text{c}}$ ,
- (18)  $-\text{NR}^{\text{d}}\text{C}(\text{O})\text{OR}^{\text{e}}$ ,
- (19)  $-\text{NR}^{\text{d}}\text{C}(\text{O})\text{NR}^{\text{d}}\text{R}^{\text{e}}$ ,
- (20)  $-\text{CR}^{\text{d}}(\text{N}-\text{OR}^{\text{e}})$ ,
- (21)  $-\text{CF}_3$ ,
- (22)  $-\text{OCF}_3$
- (23)  $\text{C}_3$ -8cycloalkyl, and
- (24) cycloheteroalkyl;

wherein each cycloalkyl and cycloheteroalkyl moiety is unsubstituted or substituted with one, two or three substituents independently selected from  $\text{R}^{\text{h}}$ ;

each  $\text{R}^{\text{b}}$  is independently selected from:

- (1)  $\text{R}^{\text{a}}$ ,
- (2)  $\text{C}_{1-10}$ alkyl,
- (3) cycloalkyl $\text{C}_{1-4}$ alkyl-,
- (4) cycloheteroalkyl $\text{C}_{1-4}$ alkyl-,
- (5) aryl,
- (6) aryl $\text{C}_{1-4}$ alkyl-,
- (7) heteroaryl, and
- (8) heteroaryl $\text{C}_{1-4}$ alkyl-,

wherein each cycloalkyl, cycloheteroalkyl, aryl and heteroaryl moiety is unsubstituted or substituted with one, two or three substituents independently selected from  $\text{R}^{\text{h}}$ ;

each  $\text{R}^{\text{c}}$  is independently selected from:

- (1) hydrogen,
- (2)  $\text{C}_{1-10}$ alkyl,
- (3)  $\text{C}_{2-10}$ alkenyl,
- (4)  $\text{C}_{2-10}$ alkynyl,
- (5)  $\text{C}_{1-8}$ perfluoroalkyl,
- (6) cycloalkyl,
- (7) cycloalkyl- $\text{C}_{1-10}$ alkyl-,
- (8) cycloheteroalkyl,

- (9) cycloheteroalkyl-C<sub>1-10</sub> alkyl-,
- (10) aryl,
- (11) heteroaryl,
- (12) aryl-C<sub>1-10</sub>alkyl-,
- (13) heteroaryl-C<sub>1-10</sub>alkyl-, and
- (14) -NR<sup>d</sup>R<sup>d</sup>,

wherein each alkyl, cycloalkyl, cycloheteroalkyl, aryl, and heteroaryl moiety is unsubstituted or substituted with one or two R<sup>h</sup> substituents, and each alkyl, cycloalkyl, cycloheteroalkyl may also be substituted on a carbon or sulfur atom with one or two oxo substituents.

each R<sup>d</sup> is independently selected from hydrogen, C<sub>1-10</sub>alkyl, C<sub>1-10</sub>alkylcarbonyl-, aryl, arylcarbonyl-, arylsulfonyl-, and C<sub>1-10</sub>alkylsulfonyl-; wherein each alkyl and aryl moiety is unsubstituted or substituted with one, two or three substituents independently selected from R<sup>h</sup>;

R<sup>e</sup> and R<sup>f</sup> are independently selected from hydrogen, C<sub>1-10</sub>alkyl, C<sub>2-10</sub> alkenyl, C<sub>2-10</sub>alkynyl, trifluoromethyl, cycloalkyl, cycloalkyl-C<sub>1-10</sub> alkyl, cycloheteroalkyl, cycloheteroalkyl-C<sub>1-10</sub> alkyl, aryl, heteroaryl, aryl-C<sub>1-10</sub> alkyl, and heteroaryl-C<sub>1-10</sub> alkyl at each occurrence; or when bonded to the same atom, R<sup>e</sup> and R<sup>f</sup> together with the atom to which they are attached form a ring of 5 to 7 members containing 0, 1, or 2 heteroatoms independently selected from oxygen, sulfur and nitrogen; and

each R<sup>e</sup> and R<sup>f</sup> moiety is unsubstituted or substituted on a carbon or nitrogen atom with one, two or three substituents selected from R<sup>h</sup>;

each R<sup>h</sup> is independently selected from:

- (1) halogen,
- (2) C<sub>1-10</sub>alkyl,
- (3) C<sub>3-8</sub>cycloalkyl,
- (4) cycloheteroalkyl,
- (5) aryl,
- (6) arylC<sub>1-4</sub>alkyl-,
- (7) heteroaryl,
- (8) heteroarylC<sub>1-4</sub>alkyl-,
- (9) -OR<sup>i</sup>,
- (10) -NR<sup>k</sup>S(O)<sub>m</sub>R<sup>i</sup>,
- (11) -S(O)<sub>m</sub>R<sup>i</sup>,
- (12) -SR<sup>i</sup>,
- (13) -S(O)<sub>2</sub>OR<sup>i</sup>,
- (14) -NR<sup>i</sup>R<sup>i</sup>,

- (15)  $-O(CR^kR^k)_nNR^iR^i$ ,
- (16)  $-C(O)R^i$ ,
- (17)  $-CO_2R^i$ ,
- (18)  $-CO_2(CR^kR^k)_nCONR^iR^i$ ,
- (19)  $-OC(O)R^i$ ,
- (20)  $-CN$ ,
- (21)  $-C(O)NR^iR^i$ ,
- (22)  $-NR^kC(O)R^i$ ,
- (23)  $-OC(O)NR^iR^i$ ,
- (24)  $-NR^kC(O)OR^i$ ,
- (25)  $-NR^kC(O)NR^iR^i$ ,
- (26)  $-CF_3$ , and
- (27)  $-OCF_3$ .

each  $R^i$  is independently selected from:

- (1) hydrogen,
- (2)  $C_1$ -alkyl,
- (3)  $C_2$ -alkenyl,
- (4)  $C_2$ -alkynyl,
- (5)  $C_1$ -6perfluoroalkyl,
- (6) cycloalkyl,
- (7) cycloalkyl- $C_1$ -6alkyl-,
- (8) cycloheteroalkyl,
- (9) cycloheteroalkyl- $C_1$ -6 alkyl-,
- (10) aryl,
- (11) heteroaryl,
- (12) aryl- $C_1$ -6alkyl-, and
- (13) heteroaryl- $C_1$ -6alkyl-,

wherein each alkyl, cycloalkyl, cycloheteroalkyl, aryl, and heteroaryl is unsubstituted or substituted with one or two substituents selected from hydroxy, methoxy, acetoxy, halogen, cyano, and trifluoromethyl;

and each alkyl, cycloalkyl, cycloheteroalkyl may be substituted on a carbon or sulfur atom with one or two oxo substituents; and each cycloalkyl, cycloheteroalkyl, aryl and heteroaryl may be substituted with methyl;

each  $R^k$  is independently selected from hydrogen,  $C_1$ -10alkyl,  $C_1$ -10alkylcarbonyl-, aryl- $C_1$ -3alkyl-, and arylcarbonyl-, wherein the alkyl and aryl moieties may be unsubstituted or substituted

with one, two or three substituents independently selected from hydroxy, methoxy, acetoxy, halogen, trifluoromethyl, cyano, and aryl may also be substituted with methyl;  
m is selected from 1 and 2; and  
n is selected from 1, 2, and 3;  
or a pharmaceutically acceptable salt thereof.

Claim 2 (original). The compound according to Claim 1, wherein;  
R<sup>3</sup> is selected from:

- (1) hydrogen, and
- (2) methyl;

Ar<sup>1</sup> and Ar<sup>2</sup> are each phenyl, either unsubstituted or substituted with one or two substituents independently selected from R<sup>b</sup>;

each R<sup>a</sup> is independently selected from:

- (1) -OR<sup>e</sup>,
- (2) halogen,
- (3) -NR<sup>c</sup>R<sup>f</sup>,
- (4) -C(O)R<sup>c</sup>,
- (5) -CO<sub>2</sub>R<sup>c</sup>,
- (6) -OC(O)R<sup>c</sup>,
- (7) -CN,
- (8) -CF<sub>3</sub>, and
- (9) -OCF<sub>3</sub>;

each R<sup>b</sup> is independently selected from:

- (1) R<sup>a</sup>,
- (2) C<sub>1-6</sub>alkyl,
- (3) cycloalkylmethyl-,
- (4) cycloheteroalkylmethyl-,
- (5) phenyl,
- (6) benzyl,
- (7) pyridyl, and
- (8) pyridylmethyl-,

wherein each cycloalkyl, cycloheteroalkyl, phenyl and pyridyl moiety is unsubstituted or substituted with one, two or three substituents independently selected from R<sup>h</sup>;

each R<sup>c</sup> is independently selected from:

- (1) hydrogen,
- (2) C<sub>1-6</sub>alkyl,
- (3) trifluoromethyl,



- (4) C<sub>3-7</sub>cycloalkyl,
- (5) C<sub>3-7</sub>cycloalkyl-methyl-,
- (6) cycloheteroalkyl,
- (7) cycloheteroalkyl-methyl-,
- (8) phenyl,
- (9) pyridyl,
- (10) benzyl,
- (11) pyridylmethyl-, and
- (12) -NR<sup>d</sup>R<sup>d</sup>,

wherein each alkyl, cycloalkyl, cycloheteroalkyl, aryl, and heteroaryl moiety is may be substituted with one or two R<sup>h</sup> substituents, and each alkyl, cycloalkyl, cycloheteroalkyl may be substituted on a carbon or sulfur atom with one or two oxo substituents; each R<sup>d</sup> is independently selected from hydrogen, and C<sub>1-6</sub>alkyl; wherein the alkyl group may be unsubstituted or substituted with one or two substituents independently selected from R<sup>h</sup>; R<sup>e</sup> and R<sup>f</sup> are independently selected from hydrogen, C<sub>1-6</sub>alkyl, trifluoromethyl, cycloalkyl, cycloalkyl-methyl, cycloheteroalkyl, cycloheteromethyl, phenyl, pyridyl, benzyl, and pyridylmethyl at each occurrence; or when bonded to the same atom, R<sup>e</sup> and R<sup>f</sup> together with the atom to which they are attached form a ring of 5 to 7 members containing 0, 1, or 2 heteroatoms independently selected from oxygen, sulfur and nitrogen; and each R<sup>e</sup> and R<sup>f</sup> moiety may be unsubstituted or substituted on a carbon or nitrogen atom with one, two or three substituents selected from R<sup>h</sup>; each R<sup>h</sup> is independently selected from:

- (1) halogen,
- (2) C<sub>1-3</sub>alkyl,
- (3) hydroxy,
- (4) methoxy,
- (5) -NR<sup>i</sup>R<sup>i</sup>, wherein R<sup>i</sup> is selected from hydrogen and methyl,
- (6) methylcarbonyloxy,
- (7) CF<sub>3</sub>, and
- (8) -OCF<sub>3</sub>;

or a pharmaceutically acceptable salt thereof.

Claim 3 (original). The compound according to Claim 2, wherein R<sup>1</sup> is selected from:

- (1) halogen,
- (2) C<sub>1-4</sub>alkyl,

- (3) -CN,
- (4) -COR<sup>7</sup>,
- (5) -OR<sup>d</sup>,
- (6) -NR<sup>5</sup>R<sup>6</sup>, and
- (7) cycloheteroalkyl,

wherein each alkyl moiety is unsubstituted or substituted with one, two, or three substituents independently selected from R<sup>a</sup>, and each cycloheteroalkyl moiety is unsubstituted or substituted with one, two, or three substituents independently selected from R<sup>b</sup>;

R<sup>2</sup> is selected from:

- (1) hydrogen,
- (2) -NR<sup>5</sup>R<sup>6</sup>,
- (3) -C(O)R<sup>7</sup>,
- (4) C<sub>1-6</sub>alkyl,
- (5) phenyl,
- (6) pyridyl,
- (7) cycloheteroalkyl,
- (8) -OR<sup>d</sup>,

wherein each alkyl moiety is unsubstituted or substituted with one, two, or three substituents independently selected from R<sup>a</sup>; and each phenyl and pyridyl moiety is unsubstituted or substituted with one, two, or three substituents independently selected from R<sup>b</sup>; and each cycloheteroalkyl moiety is unsubstituted or substituted with one, two, three or four substituents independently selected from R<sup>b</sup> and oxo;

or R<sup>1</sup> and R<sup>2</sup> together form a 4 to 7 membered ring, containing 1, or 2 heteroatoms independently selected from nitrogen and oxygen; unsubstituted or substituted on carbon or nitrogen with one, two or three substituents independently selected from R<sup>b</sup>, wherein one or two of the carbon substituents may also be oxo, and wherein the ring is saturated or has one degree of unsaturation; and pharmaceutically acceptable salts thereof.

Claim 4 (original). The compound according to Claim 3, wherein

R<sup>5</sup> is selected from:

- (1) hydrogen,
- (2) C<sub>1-6</sub>alkyl,
- (3) trifluoromethyl, and
- (4) methylcarbonyl-,

wherein the each alkyl moiety is unsubstituted or substituted with one or two R<sup>a</sup> substituents; and R<sup>6</sup> is each selected from:

- (1) hydrogen,

- (2) C<sub>1-6</sub>alkyl,
- (3) phenyl,
- (4) benzyl,
- (5) trifluoromethyl,
- (6) -C(O)-R<sup>c</sup>,
- (7) -CO<sub>2</sub>R<sup>c</sup>, and
- (8) -S(O)<sub>2</sub>CH<sub>3</sub>,

wherein each alkyl moiety is unsubstituted or substituted with one or two R<sup>a</sup> substituents, and each phenyl moiety is unsubstituted or substituted with one or two R<sup>b</sup> substituents, or R<sup>5</sup> and R<sup>6</sup> together form =CH-N(CH<sub>3</sub>)<sub>2</sub>;

R<sup>7</sup> is selected from:

- (1) hydrogen,
- (2) C<sub>1-6</sub>alkyl,
- (3) cycloalkyl,
- (4) cycloheteroalkyl,
- (5) aryl,
- (6) heteroaryl,
- (7) heteroaryl-C<sub>1-10</sub>alkyl-,
- (8) -OR<sup>e</sup>,
- (9) -NR<sup>d</sup>R<sup>e</sup>, and
- (10) -NH(C=O)OR<sup>e</sup>,

wherein each alkyl moiety is unsubstituted or substituted with one, two, or three substituents independently selected from R<sup>a</sup>, and each cycloalkyl, cycloheteroalkyl, aryl and heteroaryl moiety is unsubstituted or substituted with an R<sup>b</sup> substituent;

R<sup>8</sup> is selected from:

- (1) hydrogen,
- (2) -(CH<sub>2</sub>)<sub>n</sub>OC(O)R<sup>e</sup>,
- (3) C<sub>1-6</sub>alkyl,
- (4) cycloalkyl,
- (5) cycloheteroalkyl,
- (6) phenyl, and
- (7) heteroaryl,

wherein each alkyl moiety is unsubstituted or substituted with one, two, three or four substituents independently selected from R<sup>a</sup>, and each cycloalkyl, cycloheteroalkyl, phenyl and heteroaryl moiety is unsubstituted or substituted with one, two, or three substituents independently selected from R<sup>b</sup>;

and pharmaceutically acceptable salts thereof.

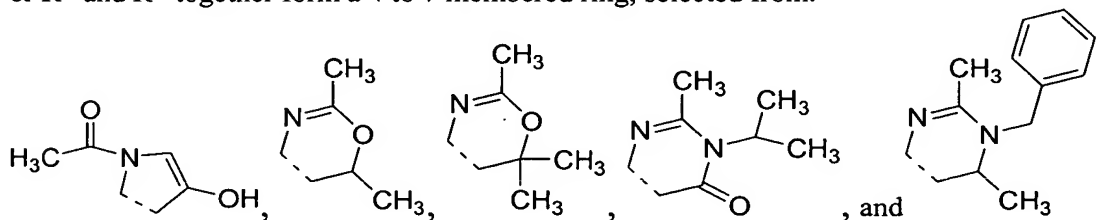
Claim 5 (original). The compound according to Claim 4, wherein:

R<sup>1</sup> is selected from:

- (1) halogen,
- (2) C<sub>1-3</sub>alkyl, unsubstituted or substituted with hydroxy or methoxy,
- (3) -CN,
- (4) methyloxycarbonyl-,
- (5) methylcarbonyl-,
- (6) isopropyloxycarbonyl-,
- (7) bromomethylcarbonyl-,
- (8) -C(O)NH<sub>2</sub>,
- (9) methoxy-,
- (10) -NR<sup>5</sup>R<sup>6</sup>, wherein R<sup>5</sup> is methyl and R<sup>6</sup> is C<sub>1-3</sub>alkyl, or R<sup>5</sup> and R<sup>6</sup>, together with the nitrogen to which they are attached, form a 5-membered cycloheteroalkyl ring, and
- (11) cycloheteroalkyl,

R<sup>2</sup> is or C<sub>1-6</sub>alkyl or NR<sup>5</sup>R<sup>6</sup>, wherein R<sup>5</sup> is selected from: hydrogen, methyl, and methylcarbonyl-, and R<sup>6</sup> is selected from, hydrogen, methyl benzyl, -C(=O)R<sup>c</sup>, and -SO<sub>2</sub>CH<sub>3</sub>;

or R<sup>1</sup> and R<sup>2</sup> together form a 4 to 7 membered ring, selected from:



R<sup>4</sup> is selected from:

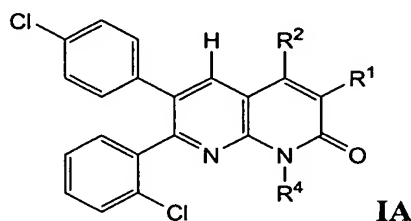
- (1) hydrogen,
- (2) C<sub>1-5</sub>alkyl,
- (3) benzyl,
- (4) pyridylmethyl-,
- (5) cycloalkyl-methyl-,
- (6) cycloheteroalkyl-methyl-,

wherein each alkyl moiety is unsubstituted or substituted with one, two, three or four substituents independently selected from R<sup>a</sup>; and each cycloalkyl, cycloheteroalkyl, phenyl and pyridyl moiety is unsubstituted or substituted with one, two, or three substituents independently selected from R<sup>b</sup>;

Ar<sup>1</sup> is phenyl, substituted with one or two substituents independently selected from halogen and methyl;

Ar<sup>2</sup> is phenyl, either unsubstituted or substituted with one or two halogen substituents;  
or a pharmaceutically acceptable salt thereof.

Claim 6 (original). The compound according to Claim 2, of structural formula IA:



wherein R<sup>1</sup>, R<sup>2</sup>, and R<sup>4</sup> are as defined in Claim 2;  
and pharmaceutically acceptable salts thereof.

Claim 7 (original). A compound selected from:

*N*-[3-acetyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;  
3-acetyl-4-amino-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-1,8-naphthyridin-2(1*H*)-one;  
*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-(1-hydroxyethyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;  
4-amino-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-1,8-naphthyridin-2(1*H*)-one;  
*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;  
9-(4-chlorophenyl)-8-(2,4-dichlorophenyl)-2,4,4,6-tetramethyl-4,6-dihydro-5*H*-[1,3]oxazino[5,4-*c*]-1,8-naphthyridin-5-one;  
*N*-[3-acetyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-ethyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;  
*N*-[3-acetyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1,5-dimethyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;  
3-acetyl-4-(benzylamino)-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-1,8-naphthyridin-2(1*H*)-one;  
3-acetyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-4-(dimethylamino)-1-methyl-1,8-naphthyridin-2(1*H*)-one;  
*N*-[3-acetyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]-*N,N*-dimethylurea;  
*N*-[3-acetyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]-*N*-methylacetamide;

*N*-[3-acetyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]-2-methoxyacetamide;

*N*-[3-acetyl-1-benzyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

*N*-[3-acetyl-6-(4-chlorophenyl)-1-(cyclopropylmethyl)-7-(2,4-dichlorophenyl)-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

*N*-[3-acetyl-1-butyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

*N*-[3-acetyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

*N*-[3-acetyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-(2-methoxyethyl)-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

*N*-[3-acetyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-2-oxo-1-(tetrahydrofuran-2-ylmethyl)-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

2-{[3-acetyl-4-(acetylamino)-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-2-oxo-1,8-naphthyridin-1(2*H*)-yl]methyl}pyridinium trifluoroacetate;

3-{[3-acetyl-4-(acetylamino)-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-2-oxo-1,8-naphthyridin-1(2*H*)-yl]methyl}pyridinium trifluoroacetate;

2-[3-acetyl-4-(acetylamino)-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-2-oxo-1,8-naphthyridin-1(2*H*)-yl]ethyl acetate;

*N*-[3-acetyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-(2,4-dimethoxybenzyl)-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

4-{[3-acetyl-4-(acetylamino)-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-2-oxo-1,8-naphthyridin-1(2*H*)-yl]methyl}pyridinium trifluoroacetate;

*N*-[3-acetyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-2-oxo-1-propyl-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

*N*-[3-acetyl-7-(2-chlorophenyl)-6-(4-chlorophenyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

*N*-[3-acetyl-7-(2-chlorophenyl)-6-(4-chlorophenyl)-1-isobutyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

*N*-(1-(2,4-dimethoxybenzyl)-3-acetyl-7-(2,4-dichlorophenyl)-6-(4-chlorophenyl)-1,2-dihydro-2-oxo-1,8-naphthyridin-4-yl)-*N*-acetylacetamide;

*N*-(1-(2,4-dimethoxybenzyl)-7-(2,4-dichlorophenyl)-6-(4-chlorophenyl)-1,2-dihydro-2-oxo-1,8-naphthyridin-4-yl)-*N*-acetylacetamide;

*N*-[3-acetyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

*N*-[3-acetyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-(2-hydroxyethyl)-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

*N*-[3-acetyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]methanesulfonamide;

2-{{[3-acetyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]amino}-2-oxoethyl acetate};

*N*-[3-acetyl-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]-2-hydroxyacetamide;

*N*-[3-acetyl-7-(2,4-dichlorophenyl)-1-methyl-6-(4-methylphenyl)-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

*N*-[3-acetyl-7-(4-chlorophenyl)-6-(2,4-dichlorophenyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

1-acetyl-8-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-hydroxy-5-methyl-1,5-dihydro-4*H*-pyrrolo[3,2-*c*]-1,8-naphthyridin-4-one;

*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1,3-dimethyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]propanamide;

*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-ethyl-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]butanamide;

4-amino-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1,3-dimethyl-1,8-naphthyridin-2(1*H*)-one;

*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1,3-dimethyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

4-amino-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-3-methyl-1,8-naphthyridin-2(1*H*)-one;

*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-3-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-3-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]-*N*-methylacetamide;

2-{{[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-3-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]amino}-2-oxoethyl acetate};

2-chloro-*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-3-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-3-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]-2-methoxyacetamide;

*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-3-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]-*N'*-ethylurea;

*N*-[3-chloro-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]-2-hydroxyacetamide;

*N*<sup>1</sup>-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-3-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]-*N*<sup>2</sup>,*N*<sup>2</sup>-dimethylglycinamide;  
*N*<sup>1</sup>-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-3-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]-*N*<sup>2</sup>-methylglycinamide;  
*N*<sup>1</sup>-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-3-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]glycinamide;  
4-amino-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-ethyl-1-methyl-1,8-naphthyridin-2(1*H*)-one;  
4-amino-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-isopropyl-1-methyl-1,8-naphthyridin-2(1*H*)-one;  
4-amino-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-methyl-1-propyl-1,8-naphthyridin-2(1*H*)-one;  
*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-ethyl-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;  
*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-isopropyl-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;  
*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-methyl-2-oxo-1-propyl-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;  
*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-ethyl-1-isobutyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;  
4-amino-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-(1-methoxyethyl)-1-methyl-1,8-naphthyridin-2(1*H*)-one;  
4-amino-3-chloro-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-1,8-naphthyridin-2(1*H*)-one;  
*N*-[3-chloro-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;  
4-amino-3-chloro-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-1,8-naphthyridin-2(1*H*)-one;  
*N*-acetyl-*N*-(3-chloro-7-(2,4-dichlorophenyl)-6-(4-chlorophenyl)-1,2-dihydro-1-isobutyl-2-oxo-1,8-naphthyridin-4-yl)acetamide;  
*N*-[3-chloro-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;  
*N*<sup>1</sup>-[3-chloro-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]-*N*<sup>2</sup>,*N*<sup>2</sup>-dimethylglycinamide;  
2-([3-chloro-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]amino)-2-oxoethyl acetate;  
*N*-[3-chloro-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]-2-hydroxyacetamide;  
*N*-acetyl-*N*-(3-chloro-7-(2-chlorophenyl)-6-(4-chlorophenyl)-1,2-dihydro-1-isobutyl-2-oxo-1,8-naphthyridin-4-yl)acetamide;



*N*-[3-chloro-7-(2-chlorophenyl)-6-(4-chlorophenyl)-1-isobutyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

*N*-[3-chloro-7-(2-chloro-4-fluorophenyl)-6-(4-chlorophenyl)-1-isobutyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

4-amino-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-(dimethylamino)-1-methyl-1,8-naphthyridin-2(1*H*)-one;

*N*-acetyl-*N*-(7-(2,4-dichlorophenyl)-6-(4-chlorophenyl)-3-(dimethylamino)-1,2-dihydro-1-methyl-2-oxo-1,8-naphthyridin-4-yl)acetamide;

*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-(dimethylamino)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

4-amino-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-[isopropyl(methyl)amino]-1-methyl-1,8-naphthyridin-2(1*H*)-one;

*N*-(3-(*N*-isopropyl-*N*-methylamino)-7-(2,4-dichlorophenyl)-6-(4-chlorophenyl)-1,2-dihydro-1-methyl-2-oxo-1,8-naphthyridin-4-yl)-*N*-acetylacetamide;

*N*-{6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-[isopropyl(methyl)amino]-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl}acetamide;

*N*-acetyl-*N*-(7-(2,4-dichlorophenyl)-6-(4-chlorophenyl)-1,2-dihydro-1-methyl-2-oxo-3-(pyrrolidin-1-yl)-1,8-naphthyridin-4-yl)acetamide;

*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-2-oxo-3-pyrrolidin-1-yl-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-methoxy-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

*N*-acetyl-*N*-(7-(2,4-dichlorophenyl)-6-(4-chlorophenyl)-1,2-dihydro-1-isobutyl-3-methoxy-2-oxo-1,8-naphthyridin-4-yl)acetamide;

*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-3-methoxy-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-3-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]-*N,N*-dimethylimidoformamide;

*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-ethyl-1-isobutyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]-*N,N*-dimethylimidoformamide;

*N*-[3-chloro-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]-*N,N*-dimethylimidoformamide;

*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-isobutyl-3-methoxy-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]-*N,N*-dimethylimidoformamide;

*N*-[6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-(1-methoxyethyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;

9-(4-chlorophenyl)-8-(2,4-dichlorophenyl)-2,4,6-trimethyl-4,6-dihydro-5*H*-[1,3]oxazino[5,4-*c*]-1,8-naphthyridin-5-one;  
6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-3-isopropyl-1-methyl-4-(methylamino)-1,8-naphthyridin-2(1*H*)-one;  
3-benzyl-9-(4-chlorophenyl)-8-(2,4-dichlorophenyl)-2,4,6-trimethyl-4,6-dihydropyrimido[5,4-*c*]-1,8-naphthyridin-5(3*H*)-one;  
methyl 4-(acetylamino)-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridine-3-carboxylate;  
methyl 4-(*N*-acetylacetamido)-7-(2,4-dichlorophenyl)-6-(4-chlorophenyl)-1,2-dihydro-1-methyl-2-oxo-1,8-naphthyridine-3-carboxylate;  
isopropyl 4-(acetylamino)-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridine-3-carboxylate;  
ethyl 4-amino-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridine-3-carboxylate;  
4-amino-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridine-3-carboxamide;  
4-(acetylamino)-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-*N,N*,1-trimethyl-2-oxo-1,2-dihydro-1,8-naphthyridine-3-carboxamide;  
9-(4-chlorophenyl)-8-(2,4-dichlorophenyl)-3-isopropyl-2,6-dimethylpyrimido[5,4-*c*]-1,8-naphthyridine-4,5(3*H*,6*H*)-dione;  
4-amino-6-(4-chlorophenyl)-7-(2,4-dichlorophenyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridine-3-carbonitrile;  
*N*-[6-(4-chlorophenyl)-3-cyano-7-(2,4-dichlorophenyl)-1-methyl-2-oxo-1,2-dihydro-1,8-naphthyridin-4-yl]acetamide;  
and pharmaceutically acceptable salts thereof.

Claim 8 (original). A method of treating a disease mediated by the cannabinoid-1 receptor comprising administration to a patient in need of such treatment of a therapeutically effective amount of a compound according to Claim 1.

Claim 9 (original). The method according to Claim 8 wherein the disease mediated by the cannabinoid-1 receptor is selected from: psychosis; memory deficit; cognitive disorders; migraine; neuropathy; neuro-inflammatory disorders; cerebral vascular accidents; head trauma; anxiety disorders; stress; epilepsy; Parkinson's disease; schizophrenia; substance abuse disorders selected from alcohol abuse, nicotine addiction, and drug addiction; constipation; chronic intestinal pseudo-obstruction; cirrhosis of the liver; asthma; and obesity, and other eating disorders associated with excessive food intake.

Claim 10 (original). The method according to Claim 9 wherein the disease mediated by the cannabinoid-1 receptor is an eating disorder associated with excessive food intake selected from obesity, bulimia nervosa, and compulsive eating disorders.

Claim 11 (original). The method according to Claim 10 wherein the eating disorder associated with excessive food intake is obesity.

Claim 12 (original). A method of preventing obesity in a person at risk for obesity comprising administration to said person of about 0.001 mg to about 100 mg per kg of a compound according to Claim 1.

Claim 13 (original). A composition comprising a compound according to Claim 1 and a pharmaceutically acceptable carrier.

Claims 14-17 (canceled).